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			ART UNIT 2192	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/621,772

Applicant(s)

O'BRIEN, WAYNE PATRICK

Examiner

Zheng Wei

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. This office action is in response to the amendment filed on 06/22/2007.
2. Claims 1, 6, 7, 12, 13, 18-21, 25, 29, 33-35, 41, 47, 53 and 54 have been amended.
3. The 35 U.S.C. 112 second paragraph rejection of claims 6, 12, 18, 35-54 are withdrawn in view of the Applicant's amendment.
4. The 35 U.S.C. 101 rejections to claims 7-12, 29-32 and 47-52 are withdrawn in view of the Applicant's amendment.
5. Claims 1-54 remain pending and have been examined.

Response to Arguments

6. Applicant's arguments filed on 06/22/2007, in particular on pages 23-25, have been fully considered but they are not persuasive. For example:
 - At page 23, section 102 Rejection, second paragraph, the Applicant contends that Garloff fails to disclose the elements in amended claims 1-34, especially in amended independent claim 1: accessing a plurality of domain rules for a military theory, each domain rule being invariant; displaying a plurality of business rules for the military theory, each business rule being variable. However, the Examiner respectfully disagrees. First of all, the term "military theory" is not properly defined in the claim or in specification and thus one in

the art is not clear what exactly the military theory is. Therefore, the term "military theory" does not further limit the claim and "rules for the military theory" can be reasonably interpreted as general rules. Because it is obvious that cited domain rules can be used for a military theory and/or non-military theory as well. As the Examiner cited in previous office action, pages 5-6, the prior art Garloff does disclose all the elements in claims.

- At pages 23, last paragraph, the Applicant submits that Garloff also fails to disclose the following elements recited in amended independent claim 21: accessing a plurality of rules for a military theory; analyzing the rules to separate a plurality of domain rules of the military theory from a plurality of business rules of the military theory, each domain rule being invariant, each business rule being variable. However, as the same reason addressed above, the term "rules for military theory" can be reasonably interpreted as general rules. As the Examiner cited in previous office action, page 9, the prior art Garloff does disclose all the elements in claims.
- From page 24, second paragraph to page 25, second paragraph, the Applicant argues that Little fails to disclose the elements specifically recited in claims 35-54, especially the elements recited in amended independent claim 35. Because the cited prior art Little (Fig. 12, 16 and 17) illustrates different types of entities and the figures do not illustrate "organizing a first subset of artifacts for display according to the first view, the first subset comprising a particular artifact" and "organizing a second subset of artifacts for display

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according to the second view, the second subset comprising the particular artifact". However, the Examiner respectfully disagrees, as in the prior art, Little defines the "Relational View Class" and the "Composite View Class" at paragraph [0051]-[0052], especially the definition of Composite View Class: "A class that represents a combination of relational table and relational view classes as an atomic operation", clearly points out that both have same type of entities, for example, "relational table" and further discloses "a particular artifact" of claim 35. Therefore, the Examiner reasserted that Little, indeed, anticipated the claim limitations as set forth in the previous Office action.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 35-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Little (Little et al., US 2002/0091990).

Claim 35:

Little discloses a method for initiating display of a view of a computer program design, comprising:

- accessing a plurality of artifacts of a computer program design, each artifact of the plurality of artifacts expressed using a modeling language (see for example, Fig.3, Fig.4 and related text, also see p.6, paragraph [0127], UML);
- receiving a selection of a first view from a plurality of views, each view of the plurality of views associated with a display of a subset of the plurality of artifacts (see for example, Fig.11 Logical View and related text);
- organizing a first subset of artifacts for display according to the first view, the first subset comprising a particular artifact (see for example, Fig.16, Fig.17 and related text);
- initiating display of the first subset of artifacts according to the first view (see for example, Fig.16-17 and related text);
- receiving a selection of a second view from the plurality of views (see for example, Fig.12, Component View and related text);
- organizing a second subset of artifacts for display according to the second view, the second subset comprising the particular artifact (see for example, Fig.12, right side panel and related text); and
- initiating display of the second subset of artifacts according to the second view (see for example, Fig.12, right side panel and related text).

Claim 36:

Little further discloses the method of claim 35, wherein an artifact of the plurality of artifacts comprises a requirement of the computer program design (see for

example, p.6, paragraph [0113], logical view, logical package).

Claim 37:

Little also discloses the method of claim 35, wherein:

- receiving the selection of the first view further comprises receiving a selection of a high-level artifact view (see for example, fig.16-17, left panel, User Cases View, high lighted “Main” and related text); and
- organizing the first subset of artifacts further comprises organizing a plurality of high-level artifacts of the plurality of artifacts according to the high-level artifact view (see for example, fig.16-17 and related text).

Claim 38:

Little further discloses the method of claim 35, wherein:

- the first view comprises a high-level artifact view, the high-level artifact view comprising a structural view (see for example, Fig.16, fig.17 and related text); and
- the second view comprises the structural view (see for example, Fig.12, Component View and related text).

Claim 39:

Little further disclose the method of claim 35, wherein:

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- the first view comprises a high-level artifact view, the high-level artifact view comprising a behavioral view (see for example, Fig.20, and related text); and
- the second view comprises the behavioral view (see for example, Fig.22 and related text).

Claim 40:

Little also discloses the method of claim 35, wherein:

- the first view comprises a structural view, the structural view comprising an active class (see for example, Fig.17 and related text, also see p.10, paragraphs [0187]-[0192]); and
- the second view comprises a behavioral view, the behavioral view comprising the active class (see for example, Fig.22 and related text, also see p.11, paragraph [0208]).

Claims 41-46 and 53:

Claims 41-46 and 53 are system version for performing the claimed method as in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, p.17, right side column, line 65 – p.19, right side column, line17). Therefore, Little's teachings also anticipate claims 41-46 and 53.

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Claims 47-52:

Claims 47-52 are a logic (procedure/method) version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claims 47-52.

Claim 54:

Claim 54 is another method version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claim 54.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable by Garloff (Garloff et al., US 5,699,310).

Claim 1:

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Garloff discloses a method, a system and procedure logic for designing a computer program, comprising:

- accessing a plurality of domain rules, each domain rule (GENERATION KNOWLEDGE BASE) being invariant (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASES INCLUDE: GENERATION RULES" and related text; also see Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text)
- displaying a plurality of business rules, each business rule (DESIGN KNOWLEDGE BASES and SPECIFICATIONS KNOWLEDGE BASE) being variable (see for example, Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text);
- selecting one or more business rules of the plurality of business rules in response to a user selection (see for example, Fig.2, "CHANGE KBASE" and Fig.3 and related text at col.9, lines 25-31);
- customizing the one or more business rules (see for example, Fig.3, "CHANGE A KBASE" and related text);
- associating the one or more business rules with a procedure (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "INHERITANCE ENGINE" and related text);

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- associating the domain rules with the procedure (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text);
- displaying a model representing the procedure (see for example, Fig.1A "FULLY INHERITED VIEW OF OBJECTS" and related text); and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.1A, "GENERATION PROCESS", "SOURCE CODE" and related text).

But does not explicitly disclose the rules are for a military theory. However, because the term/definition about military theory has not been defined, the limitation of the military theory has no impact to the claim and it is obvious that cited rules from Garloff could be the rules for military theory or for any other theories that are non-military theory. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to design, access and display a plurality of domain/business rules also can be applied for a military theory.

Claim 2:

Garloff further discloses the method of claim 1, further comprising:

- collecting the domain rules and the business rules (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE

BASE", "GENERATION KNOWLEDGE BASES", "INHERITANCE ENGINE" and related text);

- allocating the domain rules and the business rules to a plurality of use cases;
- realizing the use cases (see for example, Fig.7A and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.2, "CHECK SPECIFICATIONS", Fig.6 and related text).

Claim 3:

Garloff also discloses the method of claim 1, further comprising:

- checking a syntax of the code (see for example, Fig.6 and related text, also see col.9, line 66- col.10, line 2, "reviewing Methods for proper syntax"); and
- providing a notification if a syntax error is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 4:

Garloff further discloses the method of claim 1, further comprising:

- checking a logical consistency of the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and
- providing a notification if a logical inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 5:

Garloff also discloses the method of claim 1, further comprising:

- checking a compatibility between the model and the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and
- providing a notification if an inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 6:

Garloff further discloses the method of claim 1, wherein the model is expressed according to a modeling language (see for example, col.5, lines 47-53, "Modeler's language").

Claims 7-12:

Claims 7-12 are a logic (procedure/method) version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claims 7-12.

Claims 13-19:

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Claims 13-19 are system version for performing the claimed method as in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, Garloff's teachings also anticipate claims 13-19.

Claim 20:

Claim 20 is another method version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claim 20.

Claim 21:

Garloff discloses a method for managing rules for designing a computer program, comprising:

- accessing a plurality of rules for a military theory (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES", "INHERITANCE ENGINE" and related text);
- analyzing the rules to separate a plurality of domain rules of a military theory from a plurality of business rules, each domain rule being invariant, each business rule of a military theory being variable (see for example, Fig.1B,

“INHERITANCE ENGINE” and related text, also see Fig.3, “DISPLAY LIST OF KBASES” and related text);

- storing the business rules (see for example, Fig.3, “CLOSE/OPEN ALL KBASES” and related text); and
- providing a business rule from the stored business rules in response to a request for the business rule (see for example, Fig.3, “DISPLAY LIST OF KBASES” and related text).

Claim 22:

Garloff further discloses the method of claim 21, further comprising:

- customizing the provided business rule (see for example, Fig.3, “CHANGE A KBASE” and related text);
- associating the customized business rule with a procedure (see for example, Fig.4, “CREATE FULLY INHERITED VIEW OF OBJECT” and related text);
and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, “GENERATE”, Fig.1C, “GENERATION PROCESS”, Fig.7A and related text)

Claim 23:

Garloff also discloses the method of claim 21, further comprising:

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- associating the domain rules with a procedure (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text); and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, "GENERATE", Fig.1C, "GENERATION PROCESS", Fig.7A and related text).

Claim 24:

Garloff further discloses the method of claim 21, further comprising:

- allocating the domain rules and the business rules to a plurality of use cases (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text; also see Fig.7A and related text);
- realizing the use cases (see for example, Fig.7A, "WRITE SOURCE MODULES TO DISK FILES" and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.6 and related text for checking).

Claims 25-28 and 33:

Claims 25-28 and 33 are system version for performing the claimed method as in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, they are also obvious by Garloff's teachings.

Claims 29-32:

Claims 29-32 are a logic (procedure/method) version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, they are also obvious by Garloff's teachings.

Claim 34:

Claim 20 is another method version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, it is also obvious by Garloff's teachings.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's arguments with respect to claims rejection have been considered but are moot. Accordingly, Applicant's amendment necessitated the new ground of rejection presented in this office action and **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW



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